G R S 58]

Previous references

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1911

(Education)

File No 98 - 11

Serial Nos 9 & 13

Later references

Edn 98 - 11 Sls 21, 25 & 28
B March 12
R 67 Dec 12 - 47

GENERAL AND REVENUE SECRETARIAT

Serial Nos 9 & 13

Part B for Dec^{r} 1911

SUBJECT

Laboratory grants for the Central College

9 & From the 9 yl of Edn, no 3790/264 & 10 11 11 Submits for approval 10 lists of scientific apparatus etc required for the Central College, Bangalore

13 To Do & comptr, no 4330-1 & 8 12 11 Approves of the lists of apparatus etc proposed to be purchased

M W Arundalkar
5 1 12

GPB—5 000—22-10 16

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(RS 11]

1911-12

CENTRAL AND REVENUE SECRETARIAT

( )

NOTES

File No 98-11

THE HEADING

Laboratory Grants for the Central College

From

No 3790/264 Dated 10/16/11 Received 14/11/11

Diary 2569 Index 10 Spare Copies Serial No 9

BRIEF ABSTRACT OF LETTER

Submits for approval to lists of Scientific apparatus etc Required for the Central College, Bangalore, the charge ~~amounting~~ being met from the provision for Laboratory Grants in the Current year's budget

NOTES AND ORDERS

The amounts of Geological apparatus proposed to be purchased is £323-0-5 + marks 3,818 + Dollars 582.88 (£232-4-0) and that of ~~proposed Science~~ Botanical apparatus is £64-2-0

Invited copy of GO No 1501 2/Edn 3 dt 19/9/11 also Journ slip

Submitted with a draft

Marks approved

Flag R

NOTES—Last Sheet 21/11/11 2nd Councillor

To Delhi 21 11 11

21 11 11

G R S 12]
General and Revenue Secretariat

File No of 19

Serial No	
	Issue ch 2/12/11
	Read 8/12/11 IV Issue above hz 8/12/11
13	GO no 4330-18 8 12 11 Approves of the lists of apparatus proposed to be purchased

NOTE—Contn sheet

GPB—60 00 12 8 10

2569

[Edn 81]

OFFICE OF INSPECTOR GENERAL OF EDUCATION IN MYSORE

No 3790 / 264 Edn

Bangalore 10 November 9 1911

GEC-10 Edn
FILE No 98

From

H. J. BHABHA, Esq., M.A.,

The *Inspector General of Education in Mysore*

To

C S Balasundaram Iyer, Esq , B A ,

Offg Secretary to the Government of H H the Maharaja of Mysore, General and Revenue Departments, Bangalore

SIR

I have the honour to submit herewith 10 lists of Scientific apparatus etc , required for the Central College, Bangalore Articles mentioned in lists 1 to 9 are for Geological Laboratory A list of articles worth £47-12-0 required for the Botany section was originally Government Order No 8737-8/Edr 37-10- 0 of 24th April 1911, but the Principal reports that the order was not sent and submits a fresh list for sanction for £64-2-0 I request that Government may be pleased to sanction the list at their earliest convenience The total amount of the 1st to 9th lists namely £823-0-5 plus marks 3818 plus Dollors 582 88 plus Rs 23-4-0 will be met out of the provision made in the current year's budget for Geological Laboratory, and the amount of the 10th list namely £64-2-0 out of the provision made for Botany The favour of very early orders is requested

I have the honour to be,
Sir,
Your most obedient servant,

For Inspector General

GPB—1500—9-6-09

TNR

Central College, Bangalore

Dated, 9 November 1911

Description	Number or Quantity	Price In foreign money	Price In Rs	Full reference & page of Firm
Specific Gravity [illegible] consisting of metal stand with adjustable rising table for support of bottle or jar	Eighteen sets	£6-12-0 at £1 each		No 10224, Page 20, Illustrated Catalogue 5th edition, of Messrs A Gallenkamp and Company, 19/2 Sun Street, Finsbury E C
Glass jar for above	24 Jars	14sh		No 10224 do
Specific Gravity set for liquids	One set	15sh		No 1051 do
Four [illegible] for [illegible] cocks with India rubber tubing and jet 100 C C I/10division,	Two dozen burettes	£4-10s		No 2454, P 345 do do
Burettes stands of teak wood 21 in, with screw clamps, for two burettes each stand,	One dozen	£2-5-0		No 2704 P do do
Burette clips of brass for Mohr's burettes length 8C M	Two dozen	2-15-0		No 2537, P 346 do do
Burettes Gallons at one marl to hold or precise quantity 100 C each	Two dozen	0-6-6		No 2569, P 347 do do
Pipette [illegible] of polished woods with a brass rod or iron triple for 12 pipettes	Two holders	£0-1 -0		No 2603, P 349 do do
Measuring flasks with ground neck three of each of the following capacities 50c c. 100c c 200c.c 500c c & 1000c c	15 in all	£0-15-0		No 2608 P350 ~~No 2610 P 350~~ do do

£ 16-5-6

Description	Number or quantity	Price In foreign coinage	Price In Rs	Full reference & name of Firm
	B/	16-5-6		
Beakers, Bohemian glass Griffins tumbler form, with Spout No 00,0,and I to IO	Two sets of I2 in each set	I4s-2dat 7s-Id each set		No I06, P I8 do do
Spirit lamps, with Ground on caps, Stone ware wick-holders & wick ,I5Cc each	Four dozen	£I-7-0		No 327,P 42 do do
Wicks for Spirit lamps	One dozen packets	0-6-6		Page 43, do
Funnels, Bohemian glass plain sides, 60° round edged stem, round oblique Diameter 6cm each	Two dozen	£0-9-0		No 372, P 82 do do
Funnel stands of wood double of teak wood	One dozen	£I-I0-0		No 501c P 84 do do
Filter papers 9 cm diameter,9cm	One packet of I000	0-3-6		No 414,P 97 do do
Baryta filter papers 9cm	One packet of I000	0-4-0		No 206,P 30 do
Set of ~~Set~~ glass tubing free from lead, Nos 2,3,&4	28lbs	£I-I-0		No 915,P II4
Glass rods for Stirrers up to 2c m diameter	I4lbs	0-I0-6		No 929 do do
Diamonds for writing on glass, mounted in handle	Six	£I-4-0 at 4s each		No 939,P II7
The A a blowpipe lamp	One	0-I4-9		No I057, P I09
Blowpipes, Platiners', Figs,	Two dozen	£2-I7-0		No I077, P.I41 do do
Blowpipe charcoal Compressed, Soft wood	One gross	£I-2--		No I094, P II2 do do
		£ 28-16 5		

Description	Number or Quantity	Price In foreign coinage	In Rs	Pull reference & name of Firm
		£ 28-16-5		
Platinum wire- No 31,B S G 20 or .8 m/m diameter	3 metres weighing 3 grammes or I 1552 oz	-5/- ea rly		No III3, P I33 do do
Steel hammers for blowpipe operations, with chisel end(Platinum's) IoM W square face	two dozen	-0-1-0		No II20, P I44 do do
Steel hammers Geological, s are face chisel end Weight of head, 8oz	Twodozen	-I-Io-6		No II37, P I35 do do
Anvils of hardened Steel f r blowpipe op r tion I½inch square,	Two dozen	-I-2-0		No II4I, P I35 do do
Tubes of hard glass closed at one end in ition, 20x2	Two grosses	0-0-0		No II45, P I35 do do
Do open at both ends	Two grosses	2o-I2-0		No II48, P I35 do do
Streak plates of porc lain I3x8cm	Two dozen	0-7-0		o II6? do do
Dropping bottles, patent improved shape, with ground- in slotted stopper capacity 20C C	Two dozen	0-6-0		No II66, P.I39 do do
Mortars and pestles of agat Diameter 50 M	Two	0-8-6		No II79, P.I40
Steel forceps, for crushing Not s ate in three pie- ces Diameter of pestle I5m l.	Two	0-I0-0		No II8I, do d
Do do do 20 M	Two	-I-5-0		do do
		£ 43-0-5		

Description	Number or Quantity	Price [illegible] Indian coinage Rs	Full reference to page of Firm
		£ 43-0-5	
Mortars and pestles Wedgwood ware outside diameter 4 inches	Two dozen	£1-16-0	No II[illegible], [illegible]
Iron mortar and pestle Size no 13, 4" top & 2½" high Turned mortar & wooden handle pestle	One	0-7-5	No II[illegible] P 142
Forceps, 10cm long	Two dozen	0-5-0	No I 17A, P 141
Do with ribs & oval	Two dozen	£1-8-0	No I[illegible]17C, do
Crucibles ~~Berlin~~ porcelain with covers, 750 C	Four dozen	£0-10-0	No 1210, do
Watch glasses and edges Clock glasses in pairs to fit accurately Diameter [illegible]	Four dozen pairs	0-10-0	No 1661, P 201
Test tubes in sets, 12 in set, 7x¾ inch to 9x¾ inch	Two dozen sets	£1-4-0	No 3 01, P 1 2 do do
Test tube holders	Two dozen	0-13-6	No 3321, P 4
Test tube stands of teak tubes in one row for 12 tubes	Two dozen	£2-4-0	No 3523
Test tube brushes No 7503	Three dozen	0-3-0	
		£ 52-1-4	

Description	No or Quan	Price in Foreign Coinage	Full reference & name of Firm
		£- s -d	
Hydrochloric Ac d Sp Gr 1 19	20 lbs	0-15- 0	Price list of Pure Chemicals etc 1 08 of Messrs A Gallen amp Co Ltd 19 & 21 Sun Street Finsbury Squ re London E C
Nitric Acid Sp Gr 1 4 (Pure)	20 lbs	[illegible]	do
Sulphuric Acid Sp Gr 1 84	10 lbs	0- 2- 6	do
Ammonia (in beer bottles 1 lb each)	20 lbs	0-16- 8	do
Sodium Carbonate	2 lbs	0- 0- 2	do
Borax (powdered)	2 lbs	0- 0- 2	do
Microcosmic Salt	1 lb	0- 0-10	
Potassium Ferrocyanide Crystals	1 lb	0- 1-	do
Potassium Iodide	1	0- 4- 0	do
Potassium Iodate	2 lbs	0- 1- 2	do
Potassium Bromide (Puriss)	½ lb	0- 0- 6	do
Potassium Thiocyanide (Puriss)	¼ lb	0- 1- 4	do
Potassium Sulphocyanide	¼ lb	0- 0- 5½	do
Potassium Chlorate	2 lbs	0- 2- 0	do
Potassium Permanganate	2 lbs	0- 1- 6	do
Ammonium Molybdate	½ lb	0- 2- 4	do
Ammonium Sulphocyanate	½ lb	0- 0- 4	do
Ammonium Carbonate	2 lbs	0- 1- 3	do
Ammonium Oxalate	2 lbs	0- 2- 0	do
Barium Hydroxide Crystals	1 lb	0- 3- 6	do
Barium Chloride Puriss	2 lbs	0- 1- 0	do
Cobalt Nitrate	½ lb	0- 3- 0	do

£ 3-17-3

Description	Quantity or Quantity	Price in Foreign Currency	Full reference to Name of Firm
		£ s d	
Silver [illegible]	[illegible]	0-12- 0	Price list of [illegible] Chemicals etc., 2 Cross [illegible] Co., Ltd., [illegible] Hill, Birkbeck, [illegible]
Platinic chloride	10 [illegible]	0- [illegible]	[illegible]
Sodium Phosphate	2 lbs.	0- 1- 0	do
Stick Potash	3 lbs	0- 4- 2	do
Granulated Tin Wire	[illegible]	[illegible]	
do [illegible]	3 lbs.	0- 4- 4	do
do [illegible]	[illegible]	0- 1-	do
[illegible]	4 Ozs	0- 3- [illegible]	do
Blue & Red Litmus Paper (100 [illegible] Strips of each)	[illegible]	0- [illegible]	do
Yellow [illegible]	[illegible]	-	do

£548-11

Also £521-11

Also £530-3

II

Central College, Bangalore
9th November 1911

Description	Number in set	Price per set in Rupees	Mill reference & name of firm
A collection of [illegible] models illustrating [illegible] of paste board & plaster of [illegible]	[illegible]	30/-	No 72 P 18, of Dr [illegible] & Co to Messrs Rupp Carrey
A collection of 5 models to illustrate planes of symmetry	5 Models	112/8	No 18, P do
A collection of 6 models 50cm high	6 Models	100/-	No 4, P 27, do do
A glass model of calcite rhombohedron	1 Model	10/-	No 29, P 30, do do
A glass model of 8 cole's prisms showing the two rays of [illegible]	1 Model	20/-	No 70, P 21,
A collection of 8 crystal models [illegible] according to [illegible]	8 Models	35/-	No 100, P 56, do do
Four wire models representing [illegible] of the optical [illegible] constructed by Prof [illegible]	do	100/-	No 47, P 77, do do
Two wire models of spheres to demonstrate the position and form of the dark bands in the interference figure of double refracting crystals	2 do	100/-	No 69 P 44&45 do do
Four glass models demonstrating the dispersion in the orthorhombic and horoclinic crystals	4 do	28/-	No 80, P 81, do do
Six glass models demonstrating the optical properties of the triclinic felspars	6 do	43/-	No 76, P 49, do do
Two wire models of spheres to demonstrate spherical projection of crystals	2 Models	43/-	No 85 (a) P 57 do do

1048 marks

ad

Description	Number or Quantity	Price in Marks or Dollars or Rupees	Reference Name of Firm
Herbert Smith Refractometer I with semicylindrical lens of dense glass in case	I	25/-	No 82, P 52, of Dr F Krantz Cat No 19 Rhein German
A set of new stands (A) for crystal models constructed by Dr Krantz	6 stands	30/M	No 87P 60, do
A collection of 25 minerals 7x9cm each to illustrate specific gravity of minerals	25 minerals 7x9 cm each	60/M	No 79 P 39, Cat (a) of do do
Do do 7x9 cm each to illustrate cleavage of Minerals	25 do	60/M	No 81, P 38 do do
75 Minerals to illustrate structure, tenacity fracture etc of minerals	75 minerals do do	125/M	No 83, P 39, of do do
100 Minerals 7x9 C M each to illustrate ~~colour~~ colour	100 minerals 7x9 c m	180/M	No 85, P 39 do
25 Minerals 7x9 C M each to illustrate pleochroism fluorescence etc of minerals	25 minerals	60/-	No 87, P 39 do do
25 minerals 7x9 cm each to illustrate magnetism, pyro- electricity &c	25 do	60/M	No 89, P 39 do do
7 minerals 5x6 cm each to illustrate scale of fusibility	7 minerals 5x6 c m each	5/M	No 90 do do
25 Minerals 7x9 C M each to illustrate taste odour and feel	25 minerals 7x9cm each	25/M	No 97, do do
50 Minerals 7x9 C M each to illustrate pseudomorphism	50 minerals 7x9cm each	90/M	No 99, P 40 do
A collection of 35 twin crystals	35 minerals	60/M	No 127, P 43 do do
200 Mineral fragments for blow pipe work	200 mineral fragments	135/M	No 139P 46 do do
40 Models of cut precious stones correctly imitated in colour	40 models	25/M	No 174, P 53, do do

1923 M+L 5-0-0

Description	Number or Quantity	Price In foreign coinage	In Marks	Difference in proof firm
A collection of 36 rocks arranged according to H. Rosenbusch's Elemente der Gesteinslehre 2nd edn 1901, 12½x11 C.M. each	36 rocks	£19/-		I(a) of Cat 17 Dr. Krantz Bonn
36 Micro-sections or slides of the 336 rocks arranged according to H. Rosenbusch's Elemente der Gesteinslehre in elegant case	436 slides	£21/-		I(b) of Cat 17 do do
A collection of 120 slides of 66 rock-forming minerals cut parallel to crystallographic directions and arranged according to H. Rosenbusch's Microscopic Physiography of rock-making minerals 3rd edition in elegant case	120 slides in case	£8/-		do do
A collection of thin sections in elegant case to demonstrate the microstructure of rock forming minerals	50slides	£ 5/4		A new collection of thin sections, special Cat no/or Krantz 1904
A collection of 36 thin slides for demonstrating the structure of rock in elegant cases arranged according to Zirkel's "Lehrbuch der Petrographie"	36 slides	£6/4		do do do
50 Lantern slides of thin Sections of rock-forming minerals exhibiting the mode of occurrence of minerals in rocks- in polished wooden case	50 Lantern slides	£6/5		do do do
50 Lantern slides of thin sections demonstrating the Microstructure of rock-forming minerals in polished Mahogany case	50 lantern slides	£6/5		do do do
36 Lantern slides of thin sections of rocks to demonstrate the structure of rocks	36 lantern slides	£6/5		do do do

2288 marks + £2 5s 4—0—0

Description	Number or quantity	Price Inform In coinage &s	Full reference & name of firm
30 Lantern slides in case illustrating General Geology arranged by Profs Sir Calker of Orerirge	30 lantern slides	£2-2s/-	p 99, Dr Krantz's Cat No I7,
30 Lantern slides in case of Palaeontological Problematica	30 do	£2-2s	do do do
30 Lantern slides in case of types forms illustrating Historical Geology	30 do	£2-2s	do do do
A set of 8 models of plaster of Paris Crystallonic models according to Profr Dupare of Geneva 20 cm x 10 to 13½cm x 18 to 26cm	8 models	£18/-	Last coverpage of Cat No I7 Dr F Krantz Bonn
A collection of 20 glass models of biaxial crystals according to Profr Grubenmann of University of Zurich	20 models	£1	do do do
Wollastons' Reflecting Goniometer	I Reflecting Goniometer	00 Marks	P 93, Cat No I3 of Dr Krantz Bonn
A collection of IO Aquisetaceae	IO Aquisetaceae	I5/M	No 48 B Sammling P 9 of Dr F Krantz Cat No 9b
collection of IO Lycopodiaceae	IO Lycopodiaceae	I5/M	No 51L Sammlung P 9 of do
collection of IO Cycadeae	IO Cycadeae	I5/M	o 54C Sammlung P 9 of do
A collection of IO Coniferae	IO Coniferae	I5/M	V Sammlung No 57 P 9, of do
A collection of I5 Monocotyledons	I5 Monocotyledons	50/M	V Sammlung No 50 P 9of do do

25 98 M + £ 83-6-0

Description	Number or Quantity	Price In foreign coinage	Price In Rs	Full reference Name of Firm
A collection of 25 dicotyledons	25 dicot	25/M		1 Sammlung Lo BE P 9of do Dr Fr Krantz Cat No 2b
MICROSCOPIC COLLECTIONS				
A collection of IO algae	IO algae	IO/M		Lo 92 P IC of do do
A collection of IO cryptovasc	cII cryptovasc	2/M		c 92P IOof do do
A collection of IO cycadeae	IO cycadeae	20/M		Lo 93 P IO of do do
A collection of IO conifera	IO conifera	I2/M		Lo 99 P 9of do do
A collection of IO monocotyleae	IO monocotyleae	20/M		No IO2 P 9 of do do
A collection of IO dicotyleae	IO dicotyleae	I5/M		No IO7 P IO of do do
COLLECTION for evolution theory arranged by Profr Poelig at Bonn				
IO species Epoch of alga	IO species	25/M		No IO4 P II of do do
25 species Epoche der Gymnospermen	25 species	50/M		No IO7 P II of do do
25 species Epoche der Cretassic Protogamen	25 species	50/M		No IO3 P II of do do
25 species Epoche der Angiospermen	25 species	50/M		No IO9,P II of do do
General Paleontological collections	500 species	500/M		No 2CI, P 40 of do do

3198 Marks +83-6-0

Description	Number of Objects	Price in Foreign Coin	Full reference & name of Firm
COLLECTIONS for the volution theory after Prof Pohlig at Bonn			
Collection of general metamorphism	100	40/-	Nos. 9 No 537, P 45 of Dr Pfannenstiel Catalogue
Collection of general progressive evolution	10 species	50/-	Nos538, P 45of do do
do do	10 species	150/-.	No 541, P.45of do do
General collections of 110 thin sections of fossils	110 sections	130/-.	No.725, P.54/ of do do
Complete ~~Collection~~ collection of Paleontological figures I - VIII		200/-	No 747, P 56 of do doo

Marks 3818 + £ 83-6-0

Central College, Bangalore

Dated, 9 November 1911

Description	Number or Quantity	Price In foreign coinage	Price In Rs	Full reference & name of Firm
Students' Petrological Microscope complete	5 microscopes	£52-10-0 ~~£37~~ at £10-10s each		No 17 Fig 16 on Page 18 of Catalogue of Microscope 20th edition 1901 James Swift & Son 81, Tottenham Court Road London, W
Centering nosepieces extra	5 nose pieces	£5 at £1 each		do do do
Kleins' Quartz plates	6 plates	£3/ at 10s each		do do do
Quartz Wedges	6 quartz wedges	£3-8s at 18s each		do do do
Stage ~~Goniometers~~, Swift and Sons	3 stage ~~Goniometers~~	~~£7~~ £7-10s at £2-10s each		No 51, Fig 49 Page40, do
Dichroiscopes	2 Dichroiscopes	£1-16s at 18s each		No.53, Fig 51, do do
New Aplanatic Magnifier magnifying 6 times	1 Magnifier	15s		No 76(1), Fig 74, P 51 do
Simple pocket magnifiers mounted in vulcanite with 3 lenses	1 dozen pocket magnifiers	£1-10sat 2s-odeach		No 77, P.51 do
Achromatic Condenser Iris diaphragm & Spots	One	£2-12-0		
1 case of mounting materials and Apparatus in polished pine case	1 case	£1-18s		No 82, Fig 80, P 52, do do
Dick Petrological microscope (Smaller size) with any recent improvements	microscope	£18-18-0		No 18 Fig 17 in Catalogue of Microscope 20th Edition 1901.
Triple Nosepiece	1 nosepiece	£1-00		do do
1" lens	~~Cover~~ N A Lens (0 26)	£1-13-0		do do
	N A Lens (0 50)	£2-00		do do
	N A Lens (0 88)	£2 17-0	£ -s-d Total 108-7-0	do do

...ral College, Pargaonkar.
...ted, 9th November 1911

Description	Number or Quantity	Price In foreign coinage	In Rs	Full reference & name of Firm
Calimeter Compasses, 3in, silver dial, edge bar needle, jointed sights foroco case	12 Clinometer Compasses	£II-2s at I8s-6d each		No 2964, P 491, Baird and Tatlock Catalogue 1901
Westphals' balance for taking specific gravities with riders plummet thermometer and forceps, in polished box	6 balances	£8-0s at £I-7-6 each		No I78, P 44, do do do
Specific Gravity balance with fokers' modifications for solids and fluids	6 balances	£I0-I6s at £I-I6s each		No I79 do do
Students' balance, Reckers' in French polished 'Mahogony' glass case with counter-poised front sliding frame steel knife edges, needle pointer, nickel plated pans, to carry 70 grammes in each pan and turn to ½ a Milligram	One balance	£2-9-0		No. I24, P I8, do do do
Weights, in block without cover 20 to 001grramme	One set	2s-9d		No 205, P 47, do do do
Furnace, Battersea small Prospectors'	One	£3-5-0		No 2723, P 459, do do
Muffles to suit the above	Three muffles	0-6-9at 0-2-3 each		No 2724 do
Horse Shoe Magnets, 3 inches in length each	One dozen	0-4-0 at 4d each		No 2771, P. 470, do do
Sieves, brass wire gauze with Japanned tin frame, 6 inches in diameter I20, 90, 60, & 30 mesh	Four in all, one of each mesh	0-I0-9		No 2882 P. 484, do do
		£-37-1-3 ✓		

Description	Number or quantity	Price In foreign coinage	In Rs	Full reference and name of firm
		37-1-3		
One lid to suit the above	One	0-1-3	Vide	2883 do do
One bottom do do	One	0-0-3	Vide	2884 do
Bunsen fire non-explosive blast lamp No 3	One	£1/		No 1684 P.307 do do
Reagent bottles stoppered capacity 12 oz	Two gross	£5/.		0,949 P 172 Pairdt Matlock London
Microscope slides best, thin white 3"x1"	Two gross	10s		No 693, P 144
Cover glasses, thin white, ½"Circular	Two ounces	8s		No 702, P 145 do do
Cloth covered Card board boxes, book form to hold 3"x1" slides, to hold 100 slides each 3"x3"x1¼"	Six boxes	£1-4-0		No.709 P 146 do do
Evaporating basins, of Berlin porcelain with spout 3" diameter	Two dozen	7s-6d		No. 650 P.158 do do
Spectroscope after Kirchoff and Bunsen, with micrometer scale, illuminating lamp, adjustable slit for two spectra, accessories	One	£5-5-0		No 2369, P 416 do do
2 Gas lamps, adjustable and two chimneys		0-10-6		do do
12 Glasstubes with 2 stands		0-4-6		do do
2 tables with illustrations and 5 lithographed millimetre scales		0-2-6		do do

Total £ 51-15-2 ✓

V

Central College, Bangalore

Dated, 9 November 1911

17

description	Number or Quantity	Price In foreign coinage	Full reference & name of Firm
The "Climax"Lantern, triple rack telescopic, Single, with 10" objective lens, and with polished wooden case, extra strong with division,	One lantern	£17-17-0	Abbreviated Catalogue of Lanterns etc by Messrs Riley Brothers, Ltd 17, Colonnade, Westgate, Bradford, England

Total £ 17-17-0

VI

17

Central College, Bangalore
Dated, 9th November 1911

Description	Number or Quantity	Price In Marks	In Rs	Full reference & name of Firm
Prospecting picks, No 25I, sizeI, weight Ilb, excluding handle,	Three dozen	45 Dollars at I5 dollars per dozen		Illustrated Catalogue I900 Page 25, The Atha Tool Company, Newark, N J. U S A
Hardles, extra quality Hickory handles for Engineers ' hammers etc Size I,	Four dozen	2 88 dollars at 72 c per dozen		Do do Page50, do

Total 47·88 Dollars

Copied

VII

Central College, Bangalore

Dated, 9 November 1911

Description	Number or Quantity	Price In foreign coinage Rs	Full reference & name of Firm
360 Specimens of minerals I0x7cm each with pasteboard trays & Mahogany I0 drawer cabinet	360 minerals	240 Dollars	No IIA Specialists College collection P I7, complete Mineral Catalogue of 2I6 pages Illustrated Foote Mineral Company I07 North I9th street, Philadelphia Pa U S A
25 Lecture Table crystals I2x9cm each	25 crystals	60 Dol	No 80A, P 70 do do
25 small specimens of rough precious & semi-precious stones	25 minerals	I5 Dol	No 46A, P 82 do do
25 Specimens I2x9cm each, with blocks to show the effect of radium Rontgen & Ultra violet rays etc	25 minerals I2x9cm each	40 Dol	No.I04B P.80 do do
25 rare minerals 7x5cm each, containing radium, Uranium thorium etc with trays	25 rare minerals 2x5cm each	25Doll	No 42, B P 8I, do do
28 polished ornamental stones 7x5cm each with trays	28 stones 7x5cm each	20 Doll.	No.45,B P 52 do do
60 specimens of ore association 7x5cm each, with trays and cabinet	60 minerals 7x5cm each	I5 Doll	No 44,B. P 5I do do
I20 specimens of ores I2x9cm each with blocks	I20 ores I2x9cm each	I20 Dollr.	No 29A, P 46 do do

535 Dollars

G W Kelly

VIII

Central College, Bangalore
Dated, 9th November 1911

Description	Number or Quantity	Price In Foreign Money	Price In Rs	Full reference & name of Firm
Walkers' balance for taking Specific Gravities of rocks	One	£1-10-0		No 5594 P 22 Catalogue of balances J .J Griffin & Sons 20-26, Sardinia street, Lincolns' Inn Fields, London, W C.
Profr Jolly's Spiral spring balance	One	£2-5-0		No 3595 do do
		£3-15-0		

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Central College, Bangalore
Dated, 9th November 1911

MAPS

Description	Number or Quantity	Price In Rupees	Full reference & name of Firm
Geological structure of the Globe 22"x30"	One map	Rs 10/-	Catalogue of Geographical etc publication by W & A K Johnston Ltd or Messrs Macmillan & co, Bombay.
Physical features of Europe & Asia 22"x30"	Do	Rs 4-12-0	do do
Geological map of Furope 22"x30"	Do	Rs 6-8-0	do do
Geological & Palæontological map of the British Isles 22"x30"	Do	Rs 13-0-0	do do
Physical features of N&S Americas 22"x30"	Do	Rs 4-12-0	do do
Geological map of the U S and British North America	Do	Rs 6-8-0	do do
Glacier system of the Alps 22"x30"	Do	Rs 6-8-0	do do
Phenomena of volcanic action 22"x30"	Do	Rs 6-8-0	do do
Comparative view of remarkable Geological phenomena 22"x30"	Do	Rs 4-12-0	do do
Relief map of India 23"x20"	Do	Rs 20-0-0	do do
do Furope do	Do	Rs 20-0-0	do do
do Asia do	Do	Rs 20-0-0	do do

Rs 123-4-0

Description	Number or Quantity	Price In Rupees	Full reference & name of Firm
Relief map of England & Wales 23"x20"	One map	~~£2 0 0~~ Rs 20-0-0	do do
All the above four to be framed in Maple and Gilt			
Relief map Geological series of England & Wales coloured from Geological survey maps and framed in Maple and Gilt 23"x20"	One Map	Rs 50-0-0	do do
Wall diagrams of Mineralogy and Palaeontology 244 illustrations 50"x42" coloured on cloth, rollers and varnished	Do	Rs.9-8-0	do do
Wall diagrams of Dynamical Geology 34"x28"	Do	Rs 3-I2-0	do do
Wall diagrams of Structural Geology 34"x28"	Do	Rs 3-I2-0	do do
All coloured on cloth and varnished, with rollers			
Pictorial illustrations of the seasons, on cloth rollers, varnished- a set of four 34"x28"each	A set of four	Rs.23-0-0	do do
	A	Rs 233-4-0	

X

Central College, Bangalore

Dated 8 Nov 1911

To

Messrs Bair & Tatlock, Ltd, L O N D O N.

As per catalogue of 1910

Cat No	Description of Article	No Required	Cost
			£ s d
1402 T	Large Universal [illegible] (Horse shoe foot) Change oil immersion 1/12th inch N A 1 30 to 1·0 1 Homogeneous oil immersion 2 mm N A 1 32		73-15- 0
1482 T	Large mechanical stage for stands A & B		4- 0- 0
1486 T	Screw Micrometre eyepiece		2-10- 0
1490 T	Stage Micrometre 1mm divided into 100 parts ruled on glass		0- 9- 0
1509 T	Compensating Oculars		0-16- 0
	do do		1- 5- 0
1567 T	Abbe Drawing Apparatus Large form in case		3- 0- 0
1651 T	Forceps Nickel-plated with smooth tips for cover glasses	½ doz	0- 8- 6
1659 T	Forceps Smooth outside and blunt roughened points 4 inches	2 doz	1-14- 0
1663	do fine points 5 inches	2 doz	1-14- 0
1673	Microscope Needles With Mount Points	1 gozl	0- 6- 6
1685	Dissecting Knives Length of blade 2½ inches Total length 5 inches	2 doz	2- 0- 0
1687	Scissors Nickel-plated, straight 4½ inches	2 doz	1- 8- 0
1685	Dissecting Knives Length of blade 2½ inch Total length 6½ inches	2 doz	2-17- 0
1688	Scissors Stouter form with blunt points	2 doz	- 4- 0
1094 S	Dissecting set of fine sheffield manufacture specially arranged for Botanical work (in polished Mahogany case)	2 sets	1-16- 0
		C O [illegible]	60- 4- 0

Cat No	Description of Article	No Reqd	Cost
			£ s d
		B F £	60- 4- 0
1914	Bell Jars Green Glass with knob and without flange tall form for covering Microscopes 18 inches height Diam 8 inches	2	0- 9- 0
1916	Sach's Double Bell Jars for holding various coloured liquids used in Botanical research Internal Height 13 inches Internal Diam 7 inches	3	6- 9- 0
	Total	£	64- 2- 0

GRS. 28]

Recd application
Typing Encls
8/12/11 4 pm

File No. 98/11
Serial No 13.

Diary No of letter replied to 2564

Pr... ...hness
the Maharaja of Mysore

GENERAL AND REVENUE
SECRETARIAT
( )

, the 19

Date of issue 8 12 11

Signed by

READ— Letter No 3799/264 dt/the 10th Sept 1911 from the Dpt of Edn in Mysore submitting for sanction lists of Scientific apparatus etc required for the Central College, the cost of the articles mentioned in the 1st & last Viz £323-0-5 + Marks 3,818 + Dollars 582·88 + Rs 233-4-0 her[e] not out of the provision

ORDER THEREON—

645
2700
1000
1748
250
1200
176

SUBJECT

GPB—10 000 9 9 10

for the ~~Geol~~ equipment of the
Geological Laboratory and that
of the 10th Inst Vizt £64-2-0
from the provision for the equipm
of the ~~Physics~~ Botany Laboratory, in
the current year's Budget

Order thereon

No 43301 of 1911
Edm 96-11-1

The lists of apparatus etc
proposed to be purchased are
approved

21/11/11

2/12/1

for Secretary

To the Secretary of State

Communication with a copy of the lists

Edm 21-12-11

23
21/11/11